



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R08-OAR-2016-0016; FRL- 9950-37-Region 8]

Approval and Promulgation of Air Quality Implementation Plans; State of Colorado; Motor Vehicle Inspection and Maintenance, Clean Screen Program and the Low Emitter Index, On-Board Diagnostics, and Associated Revisions.

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing approval of three State Implementation Plan (SIP) revisions submitted by the State of Colorado. The revisions involve amendments to Colorado's Regulation Number 11 "Motor Vehicle Emissions Inspection Program." The revisions address the implementation of the Low Emitter Index component of Regulation No. 11's Clean Screen Program, the implementation of the On-Board Diagnostics component of Regulation No. 11, and several other associated revisions. The EPA is proposing approval of these SIP revisions in accordance with the requirements of section 110 of the Clean Air Act (CAA).

DATES: Written comments must be received on or before **[Insert date 30 days after publication in the FEDERAL REGISTER]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R08-OAR-2016-0016 at <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a

written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Tim Russ, Air Program, EPA, Region 8, Mailcode 8P-AR, 1595 Wynkoop, Denver, Colorado 80202-1129, (303) 312-6479, russ.tim@epa.gov.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. General Information

II. Background

III. What Was the State's Process?

IV. EPA's Evaluation of the State's 2007 Revisions to the Low Emitter Index, Part A, Part C, Part F, and Appendix A

V. EPA's Evaluation of the State's 2012 Revisions to the On-Board Diagnostics Test, the Seven Model Year Emissions Test Exemption, the Gas Cap Retest, Part A, Part B, Part C, Part F, and Part G

VI. EPA's Evaluation of the State's 2013 Revisions to Part A, Part C, Appendix A, and Appendix B

VII. Conclusion

VIII. Consideration of Section 110(l) of the Clean Air Act

IX. Proposed Action

X. Incorporation by Reference

XI. Statutory and Executive Order Reviews

I. General Information

What should I consider as I prepare my comments for the EPA?

1. Submitting Confidential Business Information (CBI). Do not submit CBI to the EPA through <http://www.regulations.gov> or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to the EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.
2. Tips for preparing your comments. When submitting comments, remember to:
 - Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register volume, date, and page number);
 - Follow directions and organize your comments;
 - Explain why you agree or disagree;
 - Suggest alternatives and substitute language for your requested changes;
 - Describe any assumptions and provide any technical information and/or data that you used;
 - If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced;

- Provide specific examples to illustrate your concerns, and suggest alternatives;
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats; and,
- Make sure to submit your comments by the comment period deadline identified.

II. Background

In this action, the EPA is proposing approval of SIP revisions to Regulation No. 11 contained in three submittals from Colorado. The State's submittals were dated June 11, 2008, March 15, 2013, and March 3, 2014. Much of the content of the revisions involved minor updates to several sections of Regulation No. 11 and deletion of obsolete language. The following background discussion involves those revisions of greater significance:

a.) Colorado's 2007 revisions to Regulation No. 11 for the implementation of the Low Emitter Index (LEI) portion of the Clean Screen Program contained in Regulation No. 11

Colorado's Regulation No. 11 (hereafter "Reg. No. 11") addresses the implementation of the State's motor vehicle inspection and maintenance (I/M) program. The I/M program consists of an "enhanced" component that utilizes a dynamometer-based EPA IM240 test for 1982 and newer light-duty gasoline vehicles¹ and a two-speed idle test (TSI)² for 1981 and older light-duty gasoline vehicles. To improve motorist convenience and reduce program implementation costs, the State also administers a remote sensing-based "Clean Screen" program component of the I/M program. Remote sensing is a method for measuring vehicle emissions, while simultaneously photographing the license plate, when a vehicle passes through infrared or ultraviolet beams of

¹ See 40 CFR Part 51, Subpart S for a complete description of EPA's IM240 test. The IM240 test is essentially an enhanced motor vehicle emissions test to measure mass tailpipe emissions while the vehicle follows a computer generated driving cycle trace for 240 seconds and while the vehicle is on a dynamometer.

² See 40 CFR Part 51, Subpart S for a complete description of EPA's two-speed idle test. The two-speed idle test essentially measures the mass tailpipe emissions of a stationary vehicle; one reading is at a normal idle of approximately 700 to 800 engine revolutions per minute (RPM) and one reading at 2,500 RPM.

light. Owners of vehicles meeting the Clean Screen criteria are notified by the County Clerk that their vehicles have passed the motor vehicle inspection process and are exempt from their next regularly scheduled IM240 test.

The Clean Screen program component of Colorado's Reg. No. 11 was originally approved, for implementation in the Metro-Denver area, with the EPA's approval of the original Denver carbon monoxide (CO) redesignation to attainment and the maintenance plan (see: 66 FR 64751, December 14, 2001). The Clean Screen criteria that was approved in 2001 by the EPA (see: 66 FR 64751, December 14, 2001) required two valid passing remote sensing readings on different days or from different sensors, that met the applicable emissions reading requirements in Part F of Reg. No. 11, within a twelve-month period in order to clean-screen a vehicle.

Colorado revised Reg. No. 11 to expand the definition and requirements for a "clean-screened vehicle" to also include vehicles identified as low emitting vehicles in the state-determined Low Emitting Index (LEI) which have one passing remote sensing reading, prior to the vehicle's registration renewal date. As part of the LEI process, the Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division (hereinafter, the "Division") develops an LEI on or before July 1st of each year. The LEI is based on a tabulation of the previous calendar year's IM240 inspection program results for specific make, model, and model year vehicles that passed IM240 vehicle inspections the previous year at a minimum rate of a 98%.

By a letter dated June 11, 2008, the Governor of Colorado submitted the above 2007 Reg. No. 11 LEI revisions and other minor revisions involving changes/additions to the definitions in Reg. No. 11 and the addition of Attachment 1 to the Technical Specifications in Appendix A. These SIP revisions are discussed in further detail below in section IV.

b.) Colorado's 2012 revisions to Regulation No. 11 for the implementation of the On-Board Diagnostics test requirements contained in Regulation No. 11 and the Seven Model Year I/M Test Exemption

As noted above, Colorado's Reg. No. 11 addresses the implementation of a motor vehicle I/M program that consists of a an "enhanced" component IM240 test for 1982 and newer light-duty vehicles and a TSI test for 1981 and older light-duty gas vehicles. In addition, and beginning in January 2015, Colorado also began implementing an On-Board Diagnostics (OBD) test for certain model year vehicles. An OBD I/M test essentially means the electronic retrieval, by connecting to the computer port data link connector (DLC) in the vehicle with an OBD test analyzer, of information from a vehicle's computer system. The electronic information retrieved addresses items such as stored readiness status, diagnostic trouble codes (DTC), malfunction indicator light (MIL) illumination and other data from a vehicle's OBD system. Electronically interrogating a vehicle's OBD system allows for the determination of whether any emission related DTCs are present and if the MIL is commanded on. Should these aspects of an OBD test be present, that would indicate the existence of an emissions related malfunction with the vehicle being tested.

In addition, Colorado also extended the Reg. No. 11 exemption from I/M testing for new vehicles from four years to seven years. This revision was based on Colorado's gathering of emissions testing information over a period of several years which demonstrated that historically new and newer vehicles typically did not fail the IM240 or OBD emissions test within the first seven years of the vehicle's life.

By a letter dated March 15, 2013, the Governor of Colorado submitted the above 2012 Reg. No. 11 OBD test requirements, the seven year test exemption, and other minor revisions. These SIP revisions are discussed in further detail below in section V.

c.) Colorado's 2013 revisions to Regulation No. 11, Appendix A, Incorporation by Reference of Technical Materials, the addition of new Technical Information/Requirements, and minor revisions to Appendix B

Colorado further revised Reg. No. 11 by updating Appendix A and Appendix B to remove text and incorporate by reference certain Attachments to Appendix A, to add new language to Appendix A, and to add new language and remove obsolete language in Appendix B.

Appendix A was revised to remove the text of three technical document attachments and to note that the documents are available at CDPHE's Emissions Technical Center Procedures Manual. The technical documents are incorporated by reference into Reg. No. 11. Appendix A. The technical documents that are incorporated by reference into Reg. No. 11 are: Attachment I "PDF 1000 Scanner," Attachment II "Thermal Transfer Printer," and Attachment III "Colorado Automobile Dealers Transient Mode Test Analyzer System." Appendix A was also revised by adding Attachment V "Specifications for Colorado On-Board Diagnostic (OBD) Stand-Alone Analyzer."

Appendix B, which is entitled "Standards and Specifications for Calibration/Span Gas Suppliers," was revised with updated language in Section 1 "Definitions," Section 2 "Basic & Enhanced Idle Air Program/Technical Requirements," Section 3, "Calibration/Span Gas Approval & Labeling," Section 4 "Cylinder Tracking & Recall," Section 5 "Enhanced IM & IG 240 Air Program/Technical Requirements," Section 6 "Colorado Approval Process," and Section

7 “Blender Facility Requirements & Documentation.” Obsolete language was also removed from Appendix B.

By a letter dated March 3, 2014, the Governor of Colorado submitted the above 2013 Reg. No. 11 revisions to Appendix A and Appendix B. These SIP revisions are discussed in further detail below in section VI.

III. What Was the State’s Process?

Section 110(a)(2) of the CAA requires that a state provide reasonable notice and public hearing before adopting a SIP revision and submitting it to us.

a.) The State’s June 11, 2008 SIP submittal

On June 21, 2007 the Colorado Air Quality Control Commission (AQCC) conducted a public hearing to consider the adoption of revisions and additions to the Colorado SIP. The revisions affecting the SIP involved Reg. No. 11, the Clean Screen sections of Reg. No. 11, the LEI portion of the Clean Screen program, and associated revisions. After reviewing written comments, dated April 17, 2007, received from Rocky Mountain Clean Air Action and after conducting a public hearing, the AQCC adopted the proposed revisions to Reg. No 11 on June 21, 2007. The SIP revisions became State effective on August 30, 2007.

We evaluated the State’s June 11, 2008 submittal for Reg. No. 11 of the SIP and determined that the State met the requirements for reasonable notice and public hearing under section 110(a)(2) of the CAA. By a letter dated October 14, 2008, we advised James B. Martin, Executive Director of the CDPHE, that the SIP revisions submittal was deemed to have met the minimum “completeness” criteria found in 40 CFR part 51, Appendix V.

b.) The State’s March 15, 2013 SIP submittal

On December 20, 2012, the AQCC conducted a public hearing to consider the adoption

of revisions and additions to the Colorado SIP. The revisions affecting the SIP involved Reg. No. 11, the OBD program, the seven model year exemption from I/M testing, and associated revisions. After reviewing one supportive email written comment, dated December 16, 2012, received from Bob Armott and after conducting a public hearing, the AQCC adopted the proposed revisions to Reg. No 11 on December 20, 2012. The SIP revisions became State effective on February 15, 2013.

We evaluated the State's March 15, 2013 submittal for Reg. No. 11 of the SIP and determined that the State met the requirements for reasonable notice and public hearing under section 110(a)(2) of the CAA. By operation of law under section 110(k)(1)(B) of the CAA, the State's March 15, 2013 submittal was deemed complete on September 15, 2013.

c.) The State's March 3, 2014 SIP submittal

On November 21, 2013, the AQCC conducted a public hearing to consider the adoption of revisions and additions to the Colorado SIP. The revisions affecting the SIP included updating Appendix A and Appendix B to Reg. No. 11 to remove text, incorporate by reference certain Attachments to Appendix A, to add new language to Appendix A, and to add new language and remove obsolete language in Appendix B. After conducting a public hearing, which did not have any public comments, the AQCC adopted the proposed revisions to Reg. No 11 on November 21, 2013. The SIP revisions became State effective on December 30, 2013.

We evaluated the State's March 3, 2014 submittal for Reg. No. 11 of the SIP and determined that the State met the requirements for reasonable notice and public hearing under section 110(a)(2) of the CAA. By operation of law under section 110(k)(1)(B) of the CAA, the State's March 3, 2014 submittal was deemed complete on September 3, 2014.

IV. EPA's Evaluation of the State's 2007 Revisions to the Low Emitter Index, Part A, Part

C, Part F, and Appendix A

a.) Evaluation of the Clean Screen Program and LEI Component:

We approved the Clean Screen program component of Colorado's Reg. No. 11, for implementation in the Metro-Denver area with our approval of the original Denver carbon monoxide (CO) redesignation to attainment and the associated maintenance plan (see: 66 FR 64751, December 14, 2001). Additional discussion of the Clean Screen program was provided in our August 22, 2001 proposed rule (66 FR 44097). In evaluating the Clean Screen program for the maintenance plan, the state used EPA's MOBILE5b motor vehicle emissions calculation model and the MOBILE model's remote sensing program credit utility dated 1996³ and revised in 1998⁴. Further discussion is also provided in the State's Technical Support Document (TSD) for the 2001 CO redesignation to attainment, which is part of the EPA's final rule hard copy docket, and is also available from the State on-line at:

http://www.colorado.gov/airquality/tech_doc_repository.aspx?action=open&file=codenfnl.pdf).

For the Reg. No. 11 revisions that we approved on December 14, 2001, the State used the above tools and other data to evaluate the Clean Screen program for its implementation in the Metro-Denver area. Based on this evaluation and the review of information for the additional implementation of a Clean Screen program in Fort Collins (located in Larimer County, Colorado) and Greeley (located in Weld County, Colorado), the state concluded there would be an approximate 4% disbenefit for CO emissions and a 7% disbenefit for hydrocarbon (HC) emissions if it was assumed that 35% of the eligible vehicles were clean-screened⁵.

³ "User Guide and Description For Interim Remote Sensing Program Utility," EPA/AA/AMD/EIG/96-01, dated September, 1996.

⁴ "Program User Guide for Interim Vehicle Clean Screening Credit Utility," Draft Report, EPA420-P-98-007, dated May, 1998.

⁵ "Revised Final Economic Impact Analysis for Inspection and Maintenance per C.R.S. 25-7-110.5(4)(I), Cost Effectiveness Economic Impact Analysis, 2/1/99."

We note that the version of Reg. No. 11 that the EPA approved on December 14, 2001 included the Clean Screen criteria which required an eligible vehicle for inspection to have at least two consecutive passing remote sensing emissions readings performed on different days, or at different approved Clean Screen inspection sites, prior to its registration renewal date.

With the 2007 Reg. No. 11 revisions, the AQCC adopted modifications as proposed by the Division that expanded the Clean Screen criteria to also include vehicles with one passing remote sensing reading prior to its registration date and that the vehicle is identified as a low emitter on the LEI. To address the LEI criteria of this revised Clean Screen process, the Division develops a low emitting vehicle index on or before July 1st of each year based on a tabulation of the previous calendar year's IM240 inspection program results for specified make, model and model year vehicles. This LEI is comprised of specific make, model and model year vehicles that passed IM240 vehicle inspections the previous year at a minimum of a 98% rate. However, in developing the LEI, the Division may use passing criteria greater than 98% if necessary to ensure that the use of the LEI is equivalent or better than the use of a second remote sensing measurement in terms of air quality benefits. This process is more fully detailed in the CDPHE May, 2007 document entitled "Development and Evaluation of Colorado's Low Emitter Index."

To assess the State's Clean Screen program and its LEI component, the EPA reviewed the available CDPHE Clean Screen annual reports for 2009⁶, 2011⁷, 2012⁸, and 2013⁹. The annual reports detailed the overall effectiveness of the Clean Screen program and also contained the results of the random 2% sampling for the LEI component. This sampling procedure

⁶ "The Colorado Remote Sensing Program January – December, 2009," Colorado Department of Public Health and Environment, July, 2010.

⁷ "The Colorado Remote Sensing Program January – December, 2011," Colorado Department of Public Health and Environment, November, 2012.

⁸ "The Colorado Remote Sensing Program January – December, 2012," Colorado Department of Public Health and Environment, December, 2013.

⁹ "The Colorado Remote Sensing Program January – December, 2013," Colorado Department of Public Health and Environment, September, 2014.

involved retaining 2% of the vehicles which had been shown to pass one measurement with RSD equipment and been on the LEI index, and then requiring them to take an IM240 test for comparison. The data, including fleet coverage and emissions reduction retention, are presented below in Tables 1 and 2:

Table 1: Total Vehicles Inspected and Vehicles Clean-Screened

Year of Clean Screen Report	Total Vehicles Inspected	Vehicles that were Clean-Screened	Percent of Total Vehicles that were Clean-Screened
2009	899,646	199,344	22.0%
2011	1,156,949	246,768	21.3%
2012	1,150,562	248,224	21.6%
2013	1,184,875	233,760	19.7%

Table 2: Estimated Clean Screen Disbenefit - Based on Retained Emission Reductions

Year of Clean Screen Report	Retained HC Emission Reductions	Retained CO Emission Reductions	Retained NOx* Emission Reductions
2009	94.6%	98.1%	92.9%
2011	96.1%	98.1%	97.3%
2012	94.8%	97.1%	93.9%
2013	97.3%	96.7%	97.6%
Average Clean Screen Disbenefit	4.3%	2.5%	4.6%

*Nitrogen Oxides

The data from the State's Clean Screen reports, as excerpted and presented in the above tables, demonstrate that the disbenefit from the Clean Screen program and its LEI component continue to be within the original estimates from the Reg. No. 11 revisions that we approved on December 14, 2001. Although those original 2001 disbenefit estimates (4% for CO, 7% for HC, and assuming 35% clean-screened vehicles) were prepared with then current tools, the Clean Screen program and LEI component continue to perform within those estimates. Also, from the above four years of Clean Screen annual reports that we evaluated, the State's Reg. No. 11 revisions original estimate of 35% of the fleet being clean-screened has not been achieved. Based on the four referenced Clean Screen reports, we note that 22% or less of the eligible vehicles

have been clean-screened. Therefore, the actual emission reduction disbenefit has been less than predicted, as more vehicles have then been required to go through the IM240 test.

b.) The sections of Reg. No. 11 that were revised with the State's June 11, 2008 submittal were as follows:

1.) Part A, section II: Modify definition number 15 "Clean Screened Vehicle" to reflect the addition of the LEI; modify definition number 17 "Colorado '94" to clarify the use of the BAR 90 test analyzer systems for use after 1994; and add a new definition "Low Emitting Vehicle Index." Renumber definitions number 18 and higher.

2.) Part C, section XII: Modify section XIIA.3 regarding the requirements and procedures to clean screen an eligible vehicle and add section XIIE.4 regarding low emitting vehicles and the LEI.

3.) Part F, section VI: Renumber section VI.B as VI.C; add new section VI.B.1 which requires the development of the LEI each year; add new section VI.B.2 which establishes the 98% minimum passing criteria for the LEI; and add new section VI.B.3 which allows the Division to use a greater than 98% passing criteria if needed to equate to a second RSD reading.

4.) Appendix A, Technical Specifications, Attachment 1: Sections of Attachment 1 of the Technical Specifications contain the specifications for the PDF 1000 Scanner; some sections were unreadable and a full, retyped PDF 1000 Scanner section was provided.

5.) Appendix A, Technical Specifications, Attachment 2: Sections of Attachment 2 of the Technical Specifications contain the specifications for the Thermal Transfer Printer; some sections were unreadable and a full, retyped Thermal Transfer Printer section was provided.

The EPA notes that Part F, section III.A.2 of Reg. No. 11 was also provided with the State's June 11, 2008 submittal. This section contains IM240 test light duty vehicle emissions cutpoints for 1996 and newer vehicles (all in grams per mile). The CO, HC, and NO_x entries for

calendar year 2006 are incorrect as the State had previously provided an August 8, 2006 SIP revision submittal to remove these 2006 cutpoints (i.e., HC 0.6, CO 10.0, and NO_x 1.5). The EPA approved the removal of these 2006 cutpoints on December 20, 2012 (77 FR 75388).

V. EPA’s Evaluation of the State’s 2012 Revisions to the On-Board Diagnostics Test, the Seven Model Year Emissions Test Exemption, the Gas Cap Retest, Part A, Part B, Part C, Part F, and Part G

a.) Evaluation of the OBD Test provisions:

As we noted above, beginning in January 2015, Colorado began implementing an OBD test for certain model year vehicles. An OBD I/M test essentially means the electronic retrieval, by connecting to the computer port DLC in the vehicle with an OBD test analyzer, of information from a vehicle’s computer system addressing items such as stored readiness status, DTCs, MIL illumination and other information from a vehicle’s OBD system. Electronically interrogating a vehicle’s OBD system allows for the determination if any emission related DTCs are present and if the MIL is commanded on. Should these aspects of an OBD test be present, that would indicate the existence of an emissions related malfunction with the vehicle being tested. More detailed information on OBD I/M testing is found in 40 CFR 85, Subpart W and at the EPA’s Office of Transportation and Air Quality (OTAQ) website at:

<http://www3.epa.gov/obd/regtech/inspection.htm>. In addition, further information is provided in the EPA’s OBD rulemaking actions of April 5, 2001 (66 FR 18156), December 20, 2005 (70 FR 75403), and the EPA’s document addressing performing OBD system checks as part of an I/M program¹⁰.

¹⁰ “Performing Onboard Diagnostic System Checks as Part of a Vehicle Inspection and Maintenance Program,” EPA-420-R-01-015, dated June, 2001.

The EPA has reviewed the OBD information in the State's Administrative documentation with its March 15, 2013 submittal, the OBD I/M test procedures contained in the Reg. No. 11 revisions to Part A, Part B, Part C, and Part F, all as detailed further below, and has concluded these revisions meet the requirements of 40 CFR 85, Subpart W for OBD I/M testing and the above cited EPA final rules.

We note the Colorado OBD test provisions that were adopted in 2012 are applicable to a portion of the vehicles that are subject to an I/M test. The Reg. No. 11 revisions of 2012 also increased the new vehicle model year exemption from four to seven years, required OBD testing for the next four years (two inspection cycles for the 8th through 11th years), and required I/M 240 testing to commence with the third inspection cycle. In addition, the Reg. No. 11 revisions of 2012 allowed OBD testing for OBD equipped vehicles that were otherwise hard to test with the IM240 procedures (for example, too short of a wheelbase for the dynamometer treadmills, vehicles with very large or small wheel/tire combinations, and certain all-wheel-drive vehicles with very sensitive traction control systems), eliminated the visual inspection for 1996 and newer vehicles (because of OBD testing), and required a full emissions retest for vehicles initially failing the gas cap test. The 2012 Reg. No. 11 revisions retained other aspects of the I/M program including the use of Clean Screen technology to clean screen vehicles and annual TSI testing for 1981 and older vehicles.

In consideration of the OBD testing component of the I/M program and the extension from four years to seven years to exempt new vehicles from I/M testing (discussed further below), the State prepared an estimated emissions benefit for the implementation of both the OBD testing and extended test exemption for seven years. This estimated emissions benefit information is contained in the Administrative Documentation, that is part of the state's March

15, 2013 SIP submittal, and is provided in the section entitled “SIP Emission Reduction Equivalency Demonstration.” The information notes that the Division conducted modeling of the 2012 revisions using the then current I/M program, as implemented in the seven Metro-Denver counties area, and the new program (OBD plus the seven-year testing exemption) as fully implemented in 2017. The year 2017 was selected as that would reflect the full completion of a two-year OBD inspection cycle on applicable vehicles. The Division’s results are provided below in Table 3:

Table 3: Seven County Metro-Denver Area I/M Program Estimated Reductions in 2017

	TGH*	NOx	CO
Current I/M Program	6.008 tpd**	4.849 tpd	68.843 tpd
Revised I/M Program	6.052 tpd	5.004 tpd	64.916 tpd

*Total Gaseous Hydrocarbons

**tons per day (tpd)

As shown in Table 3 above, implementation of the Reg. No. 11 provisions of the OBD component and the seven-year exemption from I/M testing were estimated to result in a small increase in CO emissions and a slight reduction in ozone precursor emissions (NOx and TGH).

The EPA has evaluated this negligible increase in estimated CO emissions and has concluded it will not have a detrimental effect on the most recently-approved revised Metro-Denver CO maintenance plan (72 FR 46148, August 17, 2007)¹¹. Our evaluation considered the negligible increase in CO emissions of four tpd to the CO mobile sources emission inventory data in the Metro-Denver maintenance plan for the projected 2015 mobile source CO emissions of 1,416 tpd and the maintenance plan’s final maintenance year of 2021 projected mobile source CO emissions of 1,372.10 tpd. The four tpd emissions would be 0.28% of the 2015 CO mobile

¹¹ “Approval and Promulgation of Air Quality Implementation Plans; State of Colorado; Revised Denver and Longmont Carbon Monoxide Maintenance Plans, and Approval of Related Revisions,” 72 FR 46148, dated August 17, 2007.

source emissions and 0.29% of the 2021 CO mobile source emissions. In addition, we also reviewed state-certified and EPA-reviewed ambient CO air quality monitoring data that are located in the EPA's Air Quality System (AQS) database. We reviewed data from 2007 through 2015. We did not find any exceedances or violations of the CO National Ambient Air Quality Standards (NAAQS). Therefore, the Metro-Denver CO maintenance area continues to demonstrate maintenance of the CO NAAQS.

We do note that the slight reduction in ozone precursor emissions of NO_x and TGH will be beneficial as the Metro-Denver/North Front Range (NFR) 2008 8-hour ozone NAAQS nonattainment area continues to work towards attainment of that NAAQS. Additional information regarding the Metro Denver/NFR ozone nonattainment area and its status can be found in the EPA's 2008 ozone NAAQS proposed SIP Requirements rule (80 FR 51992, August 27, 2015)¹² and final rule (81 FR 26697, May 4, 2016)¹³.

b.) Evaluation of the Extension of the I/M Test Exemption from four to seven years:

Included with the March 15, 2013 Reg. No. 11 SIP revision submittal were revised provisions to increase the I/M test exemption for newer vehicles from the EPA-approved four-year exemption to seven years. Additional information and rationale were provided by the Division in the "Air Quality Control Commission Regulation Number 11 Motor Vehicle Emissions Detailed Issue Statement" which was part of the SIP submittal's Administrative Documentation.

The Division's AQCC issue statement noted that the revision to Reg. No. 11, to increase new vehicle model year exemptions from four years to seven years, was allowed by Colorado

¹² "Determinations of Attainment by the Attainment Date, Extensions of the Attainment Date, and Reclassification of Several Areas Classified as Marginal for the 2008 Ozone National Ambient Air Quality Standards," 80 FR 51992, dated August 27, 2015.

¹³ "Determinations of Attainment by the Attainment Date, Extensions of the Attainment Date, and Reclassification of Several Areas Classified as Marginal for the 2008 Ozone National Ambient Air Quality Standards," 81 FR 26697, dated May 4, 2016.

law which authorizes the AQCC to extend the duration for which new vehicles are exempt from I/M testing; 42-4-310(1)(a)(II)(C) and 42-4-306(8)(b), Colorado Revised Statute (C.R.S.)

The Division noted that the revision to extend the new vehicle model year exemption results in an overall cost savings and increased convenience to the public for tests not performed. In addition, the Division stated that the population of vehicles in this age group, and their vehicle miles traveled, are relatively high; however, since they are relatively new vehicles, their emissions are lower than those of older vehicles.

The Division concluded that increasing the duration of the new vehicle exemption increases emissions from the entire fleet. However, the EPA notes that with this particular revision to Reg. No. 11, the State simultaneously included revisions to Reg. No. 11 to initiate OBD testing requirements for applicable vehicles. As discussed above and as presented in Table 3 above, the net result of the implementation of both the seven-year extended exemption for I/M test and OBD testing showed a negligible increase of CO emissions and a slight decrease in NO_x and TGH emissions. Based on our above analysis of the Metro-Denver CO maintenance plan and relevant ambient CO air quality monitoring data, the EPA finds that the increase in the new vehicle seven-year I/M test exemption will not have an adverse effect on the approved revised Metro-Denver CO maintenance plan (72 FR 46148, August 17, 2007). We also find that the emissions from the revised seven-year I/M test exemption are offset by the additional reduction in ozone precursor emissions of NO_x and TGH realized through the State's implementation of OBD testing that covers the Metro-Denver/NFR 2008 8-hour ozone NAAQS nonattainment area.

c.) Gas Cap Full Retest Clarification and other Minor Non-substantive Revisions:

There was a clarification to the gas cap test requirements and several other minor revisions included with the March 15, 2013 Reg. No. 11 SIP revision submittal.

The state revised Reg. No. 11 to clarify that, in accordance with federal law, a full I/M retest is required after a test failure due to the lack of a gas cap or a faulty gas cap. The EPA notes that missing or malfunctioning gas caps automatically cause a test failure and require replacement of the cap and then a full emissions retest. The full retest is necessary because the gas cap seals and pressurizes the entire fuel evaporative emissions control system. If other components of the evaporative system are functional, there will be no effect on tailpipe emissions; however, if other elements of the evaporative system are faulty replacing a faulty or missing gas cap can trigger a tailpipe emissions failure. In addition, the inclusion or replacement of a malfunctioning gas cap will reduce emissions of volatile organic compounds (VOC) from a vehicle's fuel tank. This is a beneficial as VOCs are a precursor emission to the formation of ground level ozone.

The Reg. No. 11 revisions also include several 'housekeeping' items including: Correcting typographical and grammatical errors; deleting obsolete language and implementation dates; removing titles and text that were inadvertently left unchanged from prior Reg. No. 11 changes; and renumbering and recodifications according to adopted language additions and deletions.

d.) The sections of Reg. No. 11 that were revised with the State's March 15, 2013 submittal were as follows:

1.) Part A, section I: Minor wording changes to add new language and remove obsolete language in sections I.B, I.C.3, I.C.3.a, I.C.3.b, I.C.3.c, I.C.4, I.C.7, I.C.7.c, I.C.8, and I.C.9.b.

Part A, section II: A new definition number 20 was added entitled "Colorado On-Board Diagnostic (OBD) Test Analyzer System;" a new definition number 22 was added entitled "Diagnostic Trouble Code (DTC);" and, definitions number 23 to 43 were renumbered. A new

definition number 44 was added and entitled “On-Board Diagnostics II (OBD or OBDII) Test” and definitions numbered 45 to 52 were renumbered.

Part A, section IV: Section IV. D was removed which involved obsolete language and section IV.E was renumbered IV.D and also had obsolete language removed.

2.) Part B, section IX: Section IX was added and is entitled “Approval of the Colorado On-Board Diagnostic (OBD) Test Analyzer System. Also, Part B, section X was added and is entitled “The Colorado On-Board Diagnostic (OBD) Test Analyzer System.”

3.) Part C, title: The title was modified by adding “On-Board Diagnostics (OBD).”

Part C, section I.C.3: This involved minor language changes to clarify data transmission and analyzer requirements.

Part C, section II.A: This section was renumbered from II.A through II.F to instead become II.A.1 through II.A.11. Minor clarification language was added along with revised references to sections in Part C.

Part C, section II.G: This section was renumbered to II.B and clarifying language was added regarding OBD testing. Sections II.G.1 through II.G.6 were renumbered II.B.1 through II.B.6. Section II.B.4 had clarifying language added regarding applicable vehicles that were unable to be tested with the IM240 test would then be OBD tested.

Part C, section II.C: A new section II.C (II.C 1 through II.C.9) was added which specifies which vehicles are to be OBD tested and the requirements and testing procedures for an OBD test.

Part C, section III.A: This section had clarifying language added and sections III.B and III.C were removed as they addressed the model year 1996 and newer visual inspection

procedures. The remaining applicable portions of section III.C were then renumbered III.B. Sections III.D and III.E were renumbered to III.C and III.D.

Part C, section IV: A new section IV was added which addressed the requirements for applicable vehicles (1996 through those vehicles that had reached their 11th model year of age) to be evaluated with and OBD test.

Part C, prior section IV: The existing section IV was renumbered section V and also modified with clarifying language regarding the requirement for a full retest of vehicles which previously had a missing or malfunctioning gas cap.

Part C, section VIII.A.2: A new section VIII.A.2 was added which states that vehicles in their model years seven through 10 need to meet the OBD passing criteria in Part F, section VII. Sections VIII.A.2 through VIII.A.4 were renumbered VIII.A.3 through VIII.A.5.

Part C, sections VIII.B.1, VIII.B.2, and VIII.B.3: These sections had minor wording changes and deletion of obsolete language.

Part C, sections VIII.D.A through VIII.D.E: These sections were renumbered VIII.D.1 through VIII.D.5.

Part C, sections IX.G and X.A: These sections had minor clarifying language added.

4.) Part F, section V: This section was entitled “Visible Smoke.”

Part F, section VII: A new section VII was added (sections VII.A through VII.F) which stated the required OBD diagnostic inspection test passing criteria.

5.) Part G: This part had previously contained obsolete high-emitting vehicle identification pilot project language which was removed and Part G was retitled “Reserved.”

VI. EPA’s Evaluation of the State’s 2013 Revisions to Part A, Part C, Appendix A, and Appendix B

In 2013, the AQCC adopted several minor changes to Reg. No. 11. These revisions were subsequently submitted to the EPA on March 3, 2014. The sections of Reg. No. 11 that were revised with the State's March 3, 2014 submittal were as follows:

- a.) Part A, section I.C.3.c: This section was revised to clarify that the seven year new vehicle exemption, which excused vehicles from an I/M test for seven years and was previously adopted by the AQCC in December 2012, would take effect on January 1, 2015. Also, this exemption would apply retroactively to existing vehicles in their fourth, fifth, and sixth years of service.
- b.) Part A, sections I.C.8, I.C.9, and I.C.10: These sections were revised to clarify ambiguous, contradictory and obsolete Reg. No. 11 language concerning the issuance of and duration periods for "Verification of Emissions Test" exemption windshield stickers issued by motor vehicle dealers. Part A, section I.C.8 was further clarified to note that vehicles in their fourth, fifth, and sixth years of service would have the seven year exemption applied retroactively.
- c.) Part A, section I.C.3 and Part C, sections III and IV: These sections were revised to clarify that the seven-year new vehicle exemption from I/M testing, OBD testing requirements and procedures, and other changes made to Reg. No. 11 by the AQCC in December 2012, would go into effect January 1, 2015. In addition, the I/M visual inspection procedures for 1996 and newer vehicles would be retained through December 2014.
- d.) Part C, section C VIII.B.3: This section was revised to codify in Reg. No. 11 the vehicle emissions repair cost waiver amount of \$715. The AQCC has previously directed the Division to change the amount from \$450 to \$715 in November 2002, which was done. However, at that time, the AQCC had declined to note the changed repair amount in the text of Reg. No. 11.
- e.) Part C, section VIII.D.4: This section was revised regarding the qualifying criteria for an economic hardship waiver for a vehicle failing its emissions test. Section VIII.D.4 was further

revised to allow the economic hardship waiver to apply to households owning two vehicles rather than restricting hardship waivers to households owning only one vehicle.

f.) Appendix A of Reg. No. 11 was revised as follows:

1.) Appendix A was revised to remove the text of three technical document attachments and to note that the documents are available at CDPHE's Emissions Technical Center Procedures Manual. The technical documents are incorporated by reference into Reg. No. 11. Appendix A. The technical documents that are incorporated by reference into Reg. No. 11 are: Attachment I "PDF 1000 Scanner," Attachment II "Thermal Transfer Printer," and Attachment III "Colorado Automobile Dealers Transient Mode Test Analyzer System."

2.) Updated Attachment IV, entitled "Colorado Department of Public Health and Environment Specification for Colorado 97 Analyzer," to reflect technological changes to data specifications, communications protocols, and forms generation.

3.) Included a new Attachment V "*Test Analyzer Specification for On-board Diagnostics*" for licensed fleets who self-inspect their own vehicles. Note: Part B section X required this Test Analyzer Specification to be in place by December 31, 2013.

g.) Appendix B of Reg. No. 11 was revised as follows:

1.) Attachment II; the "Calibration Span Gas" labels were updated to reflect the current version of the State-official labels.

h.) Overall revised formatting and other non-substantive changes were made throughout Reg. No. 11.

VII. Conclusion

Our review of the State's Reg. No. 11 revisions, as presented above in sections IV, V, and VI, involved: 1.) The Low Emitter Index (LEI) and Clean Screen program components, 2.) The On-Board Diagnostics (OBD) I/M testing program component, 3.) The seven model-year exemption from I/M testing provisions, 4.) The requirement for a full I/M retest after the replacement of a missing or malfunctioning gas cap, 5.) New definitions, clarification language, and removal of obsolete language, 6.) Numerous revisions to Reg. No. 11 Parts A, B, C, F, G, Appendix A, and Appendix B, and 7.) Overall formatting, correction of typographic errors and other non-substantive changes. Based on our review and evaluation discussion presented above, we have determined that the Reg. No. 11 SIP revisions, submitted by the State in letters dated June 11, 2008, March 15, 2013 and March 3, 2014 sufficiently address applicable provisions in 40 CFR 51, Subpart S, 40 CFR 85, Subpart W, and applicable EPA guidance for I/M programs and that our approval is warranted.

VIII. Consideration of Section 110(1) of the Clean Air Act

Section 110(1) of the CAA states that a SIP revision cannot be approved if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress towards attainment of a NAAQS or any other applicable requirement of the CAA. The only portions of the Reg. No. 11 revisions that we described above which we believe require further consideration with regard to section 110(1) of the CAA are the revisions to the Clean Screen program to add the LEI component and the seven-year I/M test exemption.

For the LEI component of the Clean Screen program, we noted above that with our December 14, 2001 approval the Metro-Denver CO maintenance plan and implementation of the Clean Screen program as adopted at that time, the State concluded there would be an approximate 4% disbenefit for CO emissions and a 7% disbenefit for HC emissions if it was

assumed that 35% of the eligible vehicles were clean-screened. Our further evaluation of the LEI component of the Clean Screen program, as discussed above in section IV, involved the review of the State's Clean Screen annual reports for 2009, 2011, 2012 and 2013. The annual reports detailed the overall effectiveness of the Clean Screen program and also contained the results of the random 2% sampling for the LEI component. The data from the State's Clean Screen reports demonstrate that the disbenefit from the Clean Screen program, including its LEI component, continue to be within the original estimates from the Reg. No. 11 revisions that we approved on December 14, 2001. Although those original 2001 disbenefit estimates (4% for CO, 7% for HC, and 35% vehicles being clean-screened) were prepared with then current tools, the Clean Screen program and LEI component continue to perform within those estimates. Also, from the above four years of Clean Screen annual reports that we evaluated, the State's Reg. No. 11 revisions original estimate of 35% of the fleet being clean-screened has not been achieved. Based on the four referenced Clean Screen reports, we note that 22% or less of the eligible vehicles have been clean-screened. Therefore, the actual emissions reduction disbenefit has been less than predicted as more vehicles have then been required to go through the IM240 test.

With regard to the seven-year new vehicle exemption from I/M testing, as explained above in section V, we noted that with the implementation of the Reg. No. 11 provisions of the combination of the OBD testing component and the seven-year exemption from I/M testing there was estimated to be a small increase in CO emissions and a minor reduction in ozone precursor emissions (NO_x and TGH). As noted above, the EPA evaluated this small increase in estimated CO emissions and has concluded it will not have a detrimental effect on the approved revised Metro-Denver CO maintenance plan (72 FR 46148, August 17, 2007). Our evaluation considered the negligible increase in CO emissions of approximately four tons per day as compared to the

CO mobile sources emission inventory data in the Metro-Denver CO maintenance plan. As we noted above, the maintenance plan's estimated 2015 mobile source CO emissions are 1,416 tpd and the estimated 2021 (last year of the maintenance plan) mobile source CO emissions are 1,372.10 tpd. Therefore, the four tpd increase would be 0.28% of the 2015 mobile source CO emissions and the 0.29% of the 2021 mobile source CO emissions. We also reviewed available state-certified and EPA-reviewed ambient CO air quality monitoring data from the EPA's AQS database from 2007 through 2015. These data show no exceedance or violation of the CO NAAQS. We further noted that the minor increase in reductions of ozone precursor emissions of NO_x and TGH will be beneficial as the Metro-Denver/NFR 2008 8-hour ozone NAAQS nonattainment area continues to work towards attainment of that NAAQS.

With respect to other NAAQS that have the potential to be affected by our proposed approval of the above Reg. No. 11 revisions, we note that the Metro-Denver area is designated "unclassifiable/attainment" for the 1-hour NO₂ NAAQS¹⁴ and the annual and 24-hour PM_{2.5} NAAQS¹⁵ (see: 40 CFR 81.306). We reviewed available state-certified and EPA-reviewed ambient air quality monitoring data for the 1-hour NO₂ NAAQS, and the annual and 24-hour PM_{2.5} NAAQS. Our review involved EPA's AQS database and relevant data from 2007 through 2015. The data demonstrate continued attainment of the 1-hour NO₂ and PM_{2.5} annual and 24-hour NAAQS in the Metro-Denver area.

In addition to the above, we have determined the revisions to Reg. No. 11 contained in all three SIP revision submittals involving the language changes necessary to implement the LEI and Clean Screen program components, the OBD I/M testing program component, the seven model-year exemption from I/M testing provisions, the requirement for a full I/M retest after the

¹⁴ 1-hour NO₂ NAAQS: 75 FR 6474, February 9, 2010.

¹⁵ PM_{2.5} NAAQS: Annual NAAQS (78 FR 3086, January 15, 2013); 2006 24-hour NAAQS (71 FR 61144, October 17, 2006).

replacement of a missing or malfunctioning gas cap, new definitions, clarification language, removal of obsolete language, numerous minor revisions to Parts A, B, C, F, G, Appendix A and Appendix B of Reg. No. 11, overall formatting, correction of typographic errors and other non-substantive changes do not affect emissions and therefore do not have CAA section 110(l) implications.

In view of the above, the EPA proposes to find that the revisions to Colorado's Reg. No. 11 that are contained in the State's SIP submittals dated June 11, 2008, March 15, 2013 and March 3, 2014 will not interfere with attainment, reasonable further progress, or any other applicable requirement of the CAA.

IX. Proposed Action

The EPA is proposing approval of the June 11, 2008 submitted SIP revisions to Colorado's Regulation Number 11, Part A, Part C, Part F, and Appendix A. The EPA notes that Part F, section III.A.2 was also provided with the State's June 11, 2008 submittal. This section contains IM240 test light duty vehicle emissions cutpoints for 1996 and newer vehicles (all in grams per mile). The CO, HC, and NO_x entries for calendar year 2006 are incorrect as the State had previously provided an August 8, 2006 SIP revision submittal to remove these 2006 cutpoints (i.e., HC 0.6, CO 10.0, and NO_x 1.5). EPA approved the removal of these 2006 cutpoints on December 20, 2012 (77 FR 75388).

In addition, the EPA is proposing approval of the March 15, 2013 submitted SIP revisions to Regulation Number 11, Part A, Part B, Part C, Part F, and Part G. Finally, the EPA is proposing approval of the March 3, 2014 submitted SIP revisions to Regulation Number 11, Part A, Part C, Appendix A, and Appendix B.

X. Incorporation by Reference

In this rule, the EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference Colorado Air Quality Control Commission, Regulation Number 11 as discussed in section IX of this preamble. The EPA has made, and will continue to make, these documents generally available electronically through *www.regulations.gov* and/or at the EPA Region 8 Office (please contact the person identified in the “For Further Information Contact” section of this preamble for more information).

XI. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations [42 USC 7410(k), 40 CFR 52.02(a)]. Thus, in reviewing SIP submissions, the EPA’s role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this proposed action merely approves some state law as meeting federal requirements and disapproves other state law because it does not meet federal requirements; this proposed action does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, Oct. 4, 1993);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 USC 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 USC 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);

- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, Aug. 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 USC 272 note) because application of those requirements would be inconsistent with the CAA; and,
- Does not provide the EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, Feb. 16, 1994).

The SIP is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian Country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, and Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: July 26, 2016.

Shaun L. McGrath,
Regional Administrator,
Region 8.

[FR Doc. 2016-18878 Filed: 8/11/2016 8:45 am; Publication Date: 8/12/2016]